



S/N 09/909,532

PATENTIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kie Y. Ahn et al.

Examiner: Maria Guerrero

Serial No.: 09/909,532

Group Art Unit: 2822

Filed: July 20, 2001

Docket: 303.377US3

Title: POROUS SILICON OXYCARBIDE INTEGRATED CIRCUIT INSULATOR

Amdt  
7/13/02  
A. WallAMENDMENT AND RESPONSE UNDER 37 CFR § 1.111Commissioner for Patents  
Washington, D.C. 20231

This paper is in response to the Office Action mailed on June 5, 2002. Please amend the above-identified patent application as follows.

IN THE CLAIMS

Please substitute the claim set in the appendix entitled Clean Version of Pending Claims for the previously pending claim set. The substitute claim set is intended to reflect cancellation of claim 78, amendment of previously pending claims 54, 55, 58, 59, 64, 74, and 79, and addition of new claims 81-83. The specific amendments to individual claims are detailed in the following marked up set of claims.

Please cancel claim 78 and amend the following claims:

54.(Amended) A method, comprising:

providing a plurality of circuit elements on a substrate;

coating at least a portion of a surface of the substrate with a mixture of oxide and carbon sources;

transforming the mixture of oxide and carbon sources into a first porous oxycarbide glass dielectric layer on the integrated circuit and insulating first and second of the plurality of circuit elements from each other, the first porous oxycarbide glass dielectric layer having uniformly distributed voids that have an approximate diameter between 20 angstroms and 300 angstroms, wherein the first porous oxycarbide glass dielectric layer has a dielectric constant less than approximately 2.0;

selectively forming vias in the first porous oxycarbide glass dielectric layer for providing

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